AMENDMENT UNDER 37 C.F.R. § 1.111

U.S. Application No. 09/721,959 Attorney Docket No. Q61990

**AMENDMENTS TO THE CLAIMS** 

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (currently amended): A slot assignment unit for use in a time division multiple

access (1 DMA) (TDMA) transmitter, comprising:

a first table;

a second table;

a control data generation unit for receiving assignment terms for a plurality of time slots

and slot data from an external source, producing a set of assignment control data according to the

assignment terms and the slot data and storing the set of assignment control data into an entry of

said first table in response to a command signal applied thereto; and

a sequence controller for analyzing a plurality of said sets of assignment control data,

producing a plurality of address pointers, storing said plurality of address pointers in said second

table in such a sequence that the address pointers can be sequentially read out in a desired

transmission sequence, and supplying said command signal to said control data generation unit in

response to each of said address pointers.

2. (original): The slot assignment unit of claim 1, wherein said TDMA transmitter

includes a data memory for storing a plurality of transmit data, and wherein said set of

assignment control data stored in said first table includes an address of a communication

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terminal, a starting address point of each transmit data in said data memory, and a count number of slots assigned to said entry.

3. (original): A time division multiple access (TDMA) transmitter comprising:

a first table;

a second table;

a control data generation unit for receiving assignment terms for a plurality of time slots and slot data from an external source, producing a set of assignment control data according to the assignment terms and the slot data and storing the set of assignment control data into an entry of said first table in response to a command signal applied thereto; and

a sequence controller for analyzing a plurality of said sets of assignment control data, producing a plurality of address pointers, storing said plurality of address pointers in said second table in such a sequence that the address pointers can be sequentially read out from a staring address of the second table, and supplying said command signal to said control data generation unit in response to each of said address pointers;

a data memory for storing a plurality of transmit data; and

a framing unit for sequentially reading address pointers from said starting address of said second table and reading assignment control data from entries of said first table which are specified by the read address pointers and formulating a frame with the read assignment control data and said plurality of transmit data from said data memory.

- 4. (original): The TDMA transmitter of claim 3, wherein said set of assignment control data stored in said first table includes and address of an assigned communication terminal, a starting address point of each transmit data in said data memory, and a count number of assigned slots.
- 5. (original): A slot assignment method for a time division multiple access (TDMA) transmitter, comprising the steps of:
  - a) receiving assignment terms for a plurality of time slots and slot data;
- b) producing a set of assignment control data according to the assignment terms and the slot data;
- c) repeating steps (a) and (b) to produce a plurality of sets of assignment control data;
  - d) analyzing said plurality of sets of assignment control data;
  - e) storing one of said sets of assignment control data into an entry of a first table;
- f) storing an address pointer in a second table corresponding to said entry of said first table; and
- g) repeating steps (d) to (f) until all of said assignment control data are stored in the first table.
  - 6. (original): The slot assignment method of claim 5, further comprising the steps of:

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sequentially reading address pointers from a starting address of said second table and reading said plurality of sets of assignment control data from said first table in accordance with the read address pointers; and

formulating a frame with the assignment control data read from the first table.

7. (previously presented): The slot assignment unit of claim 1, wherein the assignment terms include one or more of:

priority levels classified according to at least one of communication services and urgency,

types of packets, and an uplink-to-downlink ratio within a frame.

8. (previously presented): The TDMA transmitter of claim 3, wherein the assignment terms include one or more of:

priority levels classified according to at least one of communication services and urgency,

types of packets, and an uplink-to-downlink ratio within the frame.

9. (previously presented): The slot assignment method of claim 5, wherein the assignment terms include one or more of:

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priority levels classified according to at least one of communication services and urgency,

types of packets, and

an uplink-to-downlink ratio within a frame.